

### DETAILED ACTION

1. The office action is in replay to an amendment filed on 09/29/2009. Claims 1, 14 and 22 have been amended. Claim 28 are new added. Claims 1-28 are pending.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 8-18, 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz (US Pub No 2004/0059914 A1) in view of Epstein et al(hereinafter referred as Epstein) US Patent No 5,517,567 and in further view of Inoue(hereinafter referred as Inoue 6,166,649).

5. As per claim 1: Karaoguz discloses an apparatus/method/article, comprising: an authentication device that authenticates a computing device (See 0041, 0049(i.e., **receive a request message on the first wireless device and the wireless device can operate as an authentication device**)), in communication with the authentication device, through employment of a determination that a current location of the authentication device matches an initial location of the authentication device (See Fig 3 steps 305,310 and 0019,0022,0039(i.e. **determining the**

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**location of information of the user and identify the user based on the location of the information).**

Karaoguz does not explicitly teach wherein one or more private keys employable for encryption and/or decryption of information are erased via an automatic cutoff of power upon an attempt to move the authentication device.

However Epstein teaches wherein one or more private keys employable for encryption and/or decryption of information are erased via an automatic cutoff of power upon an attempt to move the authentication device (See col.6 lines 52 through col.7 line 6(i.e., **any attempts to remove remote unit from its installed location with cut off external power supply and will result in the immediate loss of all memory including SN1 and SN2**))

Therefore it would have been obvious to one having ordinary skill in the art at that time the invention was made to modify the teaching method of Mackenzie within Karaoguz method in order to securely distributing a communication key from a master unit to a remote unit.

The combination of Karaoguz and Epstein does not explicitly teach cutoff of power initiated internal to the authentication device.

Inoue teaches cutoff of power initiated internal to the authentication device (See col.4 lines 49-58(i.e., **internal power source is cut off by using the power source cutoff means to cut off an output form the internal power source**))

Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to employ the teaching method of Inoue within the combination of Karaoguz and Epstein method in order to supply a device with improved reliability and safety by having a

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function which informs a user when there is an erroneous connection or an abnormal power – source voltage (See Inoue col.1 lines 56-60)

6. As per claim 2: the combinations of Karaoguz-Epstein-Inoue teach the apparatus wherein the computing device comprises a first computing device wherein the authentication device makes the determination that the current location of the authentication device matches the initial location of the authentication device in response to a request from a second computing device for authentication of the first computing device for a data transfer from the second computing device to the first computing device (See Karaoguz 0008,0019-0020).

7. As per claim 3: the combinations of Karaoguz-Epstein-Inoue teach the apparatus wherein the request from the second computing device comprises an authentication challenge string (See Karaoguz 0038,0041); wherein the authentication device stores one or more private keys, wherein if the current location of the authentication device matches the initial location of the authentication device, then the authentication device employs one or more of the one or more private keys to decrypt the authentication challenge string into an authentication challenge response(See Karaoguz 0038).

8. As per claim 4: the combinations of Karaoguz-Epstein-Inoue teach the apparatus wherein the authentication device sends the authentication challenge response to the second computing device, wherein the second computing device analyzes the authentication challenge response to determine whether the first computing device is authenticated for the data transfer (See Karaoguz 0037-0038).

9. As per claim 5: the combinations of Karaoguz-Epstein-Inoue teach the apparatus wherein the second computing device comprises an authentication challenge key to compare with the

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authentication challenge response received from the authentication device (See Karaoguz 0038,0041); wherein if the authentication challenge response matches the authentication challenge key, then the authentication challenge response represents that the first computing device is authenticated and the data transfer can be sent from the second computing device to the first computing device(See Karaoguz Fig 4 step 440 and 0038,0041).

10. As per claim 6: the combinations of Karaoguz-Epstein-Inoue teach the apparatus wherein upon determination that the current location of the authentication device does not match the initial location of the authentication device, the authentication device prevents authentication of the first computing device and disables the one or more private keys (See Epsteincol.6 lines 52 through col.7 line 6 ).

11. As per claim 8: the combinations of Karaoguz-Epstein-Inoue teach the apparatus wherein the authentication device comprises a base portion, a cover portion, and one or more electronic components that serve to authenticate the computing device; wherein the base portion is fixed to a surface near the computing device, wherein the cover portion is fixed to the base portion to provide a secure shell for the one or more electronic components (See Karaoguz Figs 2, 3 and 0017, 0050).

12. As per claim 9: the combinations of Karaoguz-Epstein-Inoue teach the apparatus wherein a first one of the base and cover portions receives electricity through a power port, wherein a second one of the base and cover portions receives electricity through an electrical contact with the first one of the base and cover portions(See Karaoguz Fig 5 step 515,525); wherein upon separation of the second one of the base and cover portions from the first one of the base and

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cover portions, the second one of the base and cover portions loses power and prevents authentication of the computing device(See Karaoguz Fig 5 step 515,525).

13. As per claim 10: the combinations of Karaoguz-Epstein-Inoue teach wherein the second one of the base and cover portions electrically supports one or more of the one or more electronic components that store one or more private keys, wherein the authentication device employs one or more of the one or more private keys to authenticate the computing device (See Karaoguz Fig 5 step 515,525); wherein a loss of power in the second one of the base and cover portions erases the one or more private keys from the one or more of the one or more electronic components(See Epsteincol.6 lines 52 through col.7 line 6 ).

14. As per claim 11: the combinations of Karaoguz-Epstein-Inoue teach the apparatus wherein the authentication device comprises a location sensor (See 0039); wherein upon initialization of the authentication device, the location sensor sets the initial location of the authentication device (See Karaoguz 0039,0045); wherein the location sensor determines the current location of the authentication device, wherein the authentication device compares the current location with the initial location to authenticate the computing device (See Karaoguz 0039,0045).

15. As per claim 12: the combinations of Karaoguz-Epstein-Inoue teach the apparatus wherein the location sensor comprises a global positioning system component, wherein the global positioning system component measures the initial location and the current location of the authentication device as a three-dimensional location of latitude, longitude, and altitude (See Karaoguz 0045-0046).

16. As per claim 13: the combinations of Karaoguz-Epstein-Inoue teach the apparatus

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wherein the authentication device allows authentication of the computing device upon the determination that the authentication device matches the initial location of the authentication device within a specified error message (See Karaoguz 0039, 0045)

17. As per claims 14, 22: Karaoguz discloses an apparatus comprising: receiving a request from a second computing device to authenticate a first computing device for the data transfer from the second device to the first computing device(See 0041,0049(i.e., **receive a request message on the first warless device and the wireless device can operate as an authentication device**));determining a current location of an authentication device, in response to the request from the second computing device(See Fig 3 steps 305,310 and 0019,0022(i.e. **determining the location of information of the user and identify the user based on the location of the information**)); and authenticating the first computing device if the current location of the authentication device matches an initial location of the authentication an authentication device that authenticates a computing device (See 0022,0039(i.e., **using signal generated location information to identify and authenticate available device**))

Karaoguz does not explicitly teach wherein one or more private keys employable for encryption and/or decryption of information are erased via an automatic cutoff of power upon an attempt to move the authentication device. However Epstein teaches wherein one or more private keys employable for encryption and/or decryption of information are erased via an automatic cutoff of power upon an attempt to move the authentication device (See col.6 lines 52 through col.6 line 6(i.e., **any attempts to remove remote unit from its installed location with cut off external power supply and will result in the immediate loss of all memory including SN1 and SN2**))

Therefore it would have been obvious to one having ordinary skill in the art at that time the invention was made to modify the teaching method of Mackenzie within Karaoguz method in order to securely distributing a communication key from a master unit to a remote unit.

The combination of Karaoguz and Epstein does not explicitly teach cutoff of power initiated internal to the authentication device.

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Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to employ the teaching method of Inoue within the combination of Karaoguz and Epstein method in order to supply a device with improved reliability and safety by having a function which informs a user when there is an erroneous connection or an abnormal power – source voltage (See Inoue col.1 lines 56-60)

18. As per claim 15: the combinations of Karaoguz-Epstein-Inoue teach the method wherein the request from the second computing device comprises an authentication challenge string (See Karaoguz 0038,0041); wherein the authentication device stores one or more private keys, wherein if the current location of the authentication device matches the initial location of the authentication device, then the authentication device employs one or more of the one or more private keys to decrypt the authentication challenge string into an authentication challenge response(See Karaoguz 0038).

19. As per claim 16: the combinations of Karaoguz-Epstein-Inoue teach the method wherein the authentication device sends the authentication challenge response to the second computing

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device, wherein the second computing device analyzes the authentication challenge response to determine whether the first computing device is authenticated for the data transfer (See Karaoguz 0037-0038).

20. As per claim 17: the combinations of Karaoguz-Epstein-Inoue teach the method wherein the second computing device comprises an authentication challenge key to compare with the authentication challenge response received from the authentication device (See Karaoguz 0038,0041); wherein if the authentication challenge response matches the authentication challenge key, then the authentication challenge response represents that the first computing device is authenticated and the data transfer can be sent from the second computing device to the first computing device(See Karaoguz Fig 4 step 440 and 0038,0041).

21. As per claim 18: the combinations of Karaoguz-Epstein-Inoue teach the method wherein upon determination that the current location of the authentication device does not match the initial location of the authentication device, the authentication device prevents authentication of the first computing device and disables the one or more private keys (See Epsteincol.6 lines 52 through col.7 line 6).

22. As per claim 20: the combinations of Karaoguz-Epstein-Inoue teach the method wherein the authentication device comprises a base portion, a cover portion, and one or more electronic components that serve to authenticate the computing device; wherein the base portion is fixed to a surface near the computing device, wherein the cover portion is fixed to the base portion to provide a secure shell for the one or more electronic components (See Karaoguz Figs 2, 3 and 0017, 0050).



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23. As per claim 21: the combinations of Karaoguz-Epstein-Inoue teach the method wherein a first one of the base and cover portions receives electricity through a power port, wherein a second one of the base and cover portions receives electricity through an electrical contact with the first one of the base and cover portions(See Fig 5 step 515,525); wherein upon separation of the second one of the base and cover portions from the first one of the base and cover portions, the second one of the base and cover portions loses power and prevents authentication of the computing device(See Karaoguz Fig 5 step 515,525).

24. As per claim 23: the combination of Karaoguz-Epstein-Inoue teach the apparatus wherein the one or more private keys are erased upon an attempt of open the authentication device (See Epstein col.6 lines 52 through col.6 line 6)

25. As per claim 24: the combination of Karaoguz-Epstein-Inoue teach the apparatus wherein the one or more private keys are erased via an automatic cutoff of power upon the attempt to move the authentication device (See Epstein col.6 lines 52 through col.6 line 6).

26. As per claim 25: the combination of Karaoguz-Epstein-Inoue teach the apparatus wherein the one or more private keys are erased via an automatic cutoff of power upon an attempt to open the authentication device (See Epstein col.6 lines 52 through col.6 line 6)

27. As per claim 26: the combination of Karaoguz-Epstein-Inoue teach the apparatus wherein the current location comprises a network (See Karaoguz 0009 and Fig 2 step 205).

28. As per claim 27: the combination of Karaoguz-Epstein-Inoue teach the apparatus wherein the current location comprises a room (See Epstein col.6 lines 52 through col.6 line 6).

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29. As per claim 28: the combination of Karaoguz-Epstein-Inoue teach the apparatus wherein a power distribution component internal to the authentication device initiates the cutoff of power (See col.4 lines 49-58 and Fig 1)

30. **Claims 7, 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz (US Pub No 2004/0059914 A1) in view of Epstein et al (hereinafter referred as Epstein) US Patent No 5,517,567 and in further view of Inoue (hereinafter referred as Inoue 6,166,649) and further more in view of Kobayshi et al(hereinafter referred as Kobayshi) JP 2003323599.**

31. As per claims 7, 19: the combination of Karaoguz-Epstein-Inoue teach claims 6 and 15 as recited above. Karaoguz-Epstein do not explicitly teach the apparatus wherein the authentication device stores the one or more private keys in volatile memory, wherein upon determination that the current location of the authentication device does not match the initial location of the authentication device, the authentication device cuts off power to the volatile memory to erase the one or more private keys.

However Kobayashi the apparatus wherein the authentication device stores the one or more private keys in volatile memory, wherein upon determination that the current location of the authentication device does not match the initial location of the authentication device, the authentication device cuts off power to the volatile memory to erase the one or more private keys(See 0005,0011).

Therefore it would have been obvious to one ordinary skill in art at that time the invention was made to modify the teaching method of Kobayashi within Karaoguz-Epstein-Inoue method in order to enhance security of the system.

*Conclusion*

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fikremariam Yalew whose telephone number is 5712723852. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Moazzami Nasser, can be reached on 5712738300. The fax phone number for the organization where this application or proceeding is assigned is 571-272-4195.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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